

(19) World Intellectual Property
Organization
International Bureau



555179

(43) International Publication Date
11 November 2004 (11.11.2004)

PCT

(10) International Publication Number
WO 2004/097871 A2

(51) International Patent Classification⁷: **H01G 9/20**

(21) International Application Number:
PCT/CH2004/000262

(22) International Filing Date: 29 April 2004 (29.04.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
03405306.6 30 April 2003 (30.04.2003) EP

(71) Applicant (for all designated States except US): **ECOLE
POLYTECHNIQUE FEDERALE DE LAUSANNE
(EPFL)** [CH/CH]; SRI, CM-Ecublens, CH-1015 Lausanne
(CH).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **WANG, Peng**
[CN/CH]; Chemin de Montelly 10, CH-1007 Lausanne
(CH). **ZAKEERUDDIN, Shaik, Mohammad** [IN/CH];

Avenue Longemalle 12, CH-1020 Renens (CH). **GRAET-
ZEL, Michael** [CH/CH]; Chemin de Marquisat 7a,
CH-1025 St-Sulpice (CH).

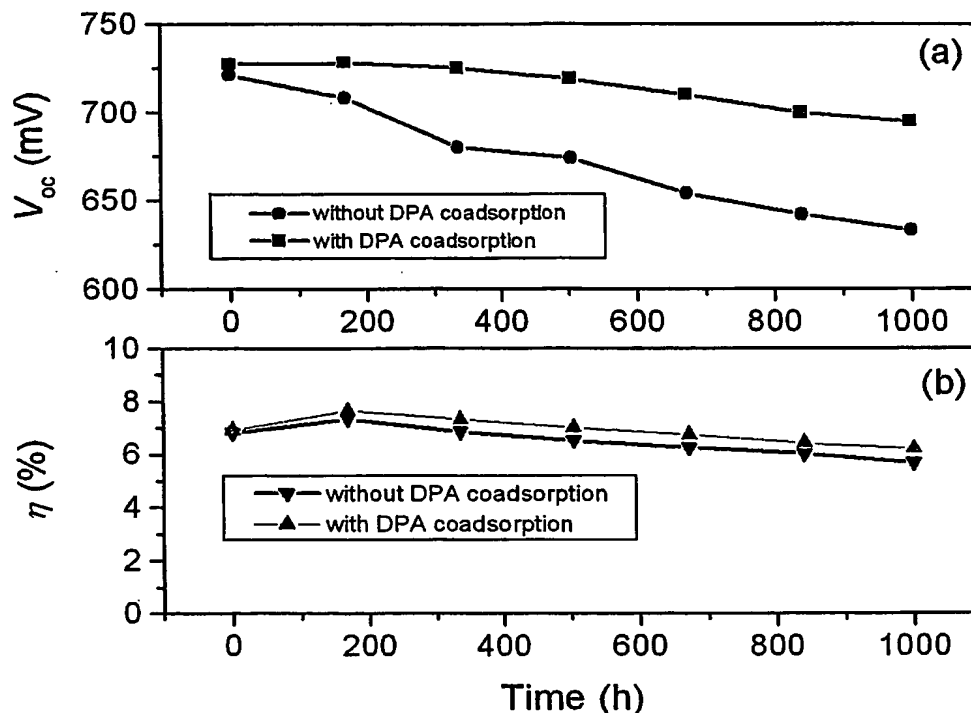
(74) Agents: **GANGUILLET, Cyril** et al.; Abrema Agence
Brevets et Marques, Ganguillet & Humphrey, Avenue du
Théâtre 16, P.O. Box 2065, CH-1002 Lausanne (CH).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),

[Continued on next page]

(54) Title: **DYE SENSITIZED SOLAR CELL**



(57) Abstract: A dye sensitized solar cell, wherein a compacting compound whose molecular structure comprises a terminal group, a hydrophobic part and an anchoring group is co-adsorbed together with the dye on the semi-conductive metal oxide layer of the photoanode, forming a dense mixed self-assembled monolayer.

WO 2004/097871 A2



European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:

- *without international search report and to be republished upon receipt of that report*